

Due Date: April 27, 2007

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**  
**BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of:	)	
	)	
Inventor: William C. Y. Lee et al.	)	Examiner: Saba Tsegaye
	)	
Serial #: 09/733,480	)	Group Art Unit: 2616
	)	
Filed: December 7, 2000	)	Appeal No.: _____
	)	
Title: TUNNELLING WIRELESS VOICE WITH )	)	
SOFTWARE-DEFINED VOCODERS )	)	

**RESPONSE TO NOTIFICATION OF NON-COMPLIANT APPEAL BRIEF**

MAIL STOP APPEAL BRIEF - PATENTS  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

Appellant's attorney received a Notification of Non-Compliant Appeal Brief dated March 27, 2007, where the Notification states that the Brief of Appellants filed on January 22, 2007 is defective for failure to comply with one or more provisions of 37 C.F.R. §41.37.

The Notification states that the brief does not contain a correct statement of the status of the claims. Appellant's attorney submits herewith a supplemental Brief of Appellants to overcome these objections.

No fee is required for filing this supplemental Brief of Appellant. However, the Office is authorized to charge any necessary fees or credit any overpayments to Deposit Account No. 50-0494 of Gates & Cooper LLP.

Respectfully submitted,

GATES & COOPER LLP  
Attorneys for Appellants

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Date: April 27, 2007

GHG/

By: /George H. Gates/  
Name: George H. Gates  
Reg. No.: 33,500

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**BRIEF OF APPELLANTS**

**MAIL STOP APPEAL BRIEF - PATENTS**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In accordance with 37 CFR §41.37, Appellants' attorney hereby submits a supplemental Brief of Appellants on appeal from the final rejection in the above-identified application as set forth in the Office Action dated August 21, 2006.

No fee is required for filing this supplemental Brief of Appellant. However, the Office is authorized to charge any necessary fees or credit any overpayments to Deposit Account No. 50-0494 of Gates & Cooper LLP.

**I. REAL PARTY IN INTEREST**

The real party in interest is Cellco Partnership, the assignee of the present application.

## II. RELATED APPEALS AND INTERFERENCES

There is an appeal pending in a related U.S. Patent Application Serial No. 09/589,974, filed on June 8, 2000, by David J. Y. Lee, Ce Xu, and William C. Y. Lee, entitled “ARCHITECTURE OF INTERNET PROTOCOL-BASED CELLULAR NETWORKS.”

## III. STATUS OF CLAIMS

Claims 1-24 are pending in the application.

Claims 1-24 were rejected under 35 U.S.C. §103(a) as being obvious in view of the combination of U.S. Patent 6,493,325 (Hjalmtysson) and U.S. Patent 6,181,734 (Palermo).

Claims 1-24 are being appealed.

## IV. STATUS OF AMENDMENTS

No amendments have been made subsequent to the final Office Action.

## V. SUMMARY OF THE CLAIMED SUBJECT MATTER

Appellants’ independent claim 1 is directed to a method for tunneling voice data over one or more networks (100). (See page 3, lines 20-31.) The method includes transmitting a notification to a called party’s network (100) that a calling party’s handset (108) is calling from a particular type of network (100). (See page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; and page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.) The method also includes loading one of a plurality of software-defined vocoders (110) into the called party’s handset (108) based on the transmitted notification, wherein the loaded software-defined vocoder (110), when executed by the called party’s handset (108), translates voice data communicated between the calling party’s handset (108) and the called party’s handset (108). (See page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; and page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.)

Appellants’ independent claim 5 is directed to an apparatus for tunneling voice data over one or more networks (100). (See page 3, lines 20-31.) The apparatus includes means for transmitting a notification to a called party’s network (100) that a calling party’s handset (108) is

calling from a particular type of network (100). (This is a means plus function element and the structures and acts described in the specification corresponding to this claimed function are found in the specification at page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; and at page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.) The apparatus also includes means for loading one of a plurality of software-defined vocoders (110) into the called party's handset (108) based on the transmitted notification, wherein the loaded software-defined vocoder (110), when executed by the called party's handset (108), translates voice data communicated between the calling party's handset (108) and the called party's handset (108). (This is a means plus function element and the structures and acts described in the specification corresponding to this claimed function are found in the specification at page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; and at page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.)

Appellants' independent claim 9 is directed to a method for tunneling voice data over one or more networks (100). (See page 3, lines 20-31.) The method includes receiving a notification from a calling party's network (100) that it is a particular type of network (100). (See page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; and page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.) The method also includes loading one of a plurality of software-defined vocoders (110) into a called party's handset (108) based on the received notification, wherein the loaded software-defined vocoder (110), when executed by the called party's handset (108), translates voice data communicated between the calling party's handset (108) and the called party's handset (108). (See page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; and page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.)

Appellants' independent claim 13 is directed to an apparatus for tunneling voice data over one or more networks (100). (See page 3, lines 20-31.) The apparatus includes means for receiving a notification from a calling party's network (100) that it is a particular type of network (100). (This is a means plus function element and the structures and acts described in the specification corresponding to this claimed function are found in the specification at page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; and at page 6, line 19 through page 7, line 9

referring to 400, 402, 404 and 406 in FIG. 4.) The apparatus also includes means for loading one of a plurality of software-defined vocoders (110) into a called party's handset (108) based on the received notification, wherein the loaded software-defined vocoder (110), when executed by the called party's handset (108), translates voice data communicated between the calling party's handset (108) and the called party's handset (108). (This is a means plus function element and the structures and acts described in the specification corresponding to this claimed function are found in the specification at page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; and at page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.)

Appellants' independent claim 17 is directed to a method for tunneling voice data over one or more networks (100). (See page 3, lines 20-31.) The method includes loading one of a plurality of vocoders (110) into a processor (302) of a called party's handset (108), wherein the loaded vocoder (110) is selected based on a particular type of network communicating with a calling party's handset (108). (See page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; page 5, line 26 through page 6, line referring to 302 in FIG. 3; and page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.) The method also includes executing the loaded vocoder (110) in the processor (302) of the called party's handset (108), wherein the vocoder (110) translates voice data communicated to the called party's handset (108) from the calling party's handset (108). (See page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; page 5, line 26 through page 6, line referring to 302 in FIG. 3; and page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.)

Appellants' independent claim 21 is directed to an apparatus for tunneling voice data over one or more networks (100). (See page 3, lines 20-31.) The apparatus includes means for loading one of a plurality of vocoders (110) into a processor (302) of a called party's handset (108), wherein the loaded vocoder (110) is selected based on a particular type of network (100) communicating with calling party's handset (108). (This is a means plus function element and the structures and acts described in the specification corresponding to this claimed function are found in the specification at page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; page 5, line 26 through page 6, line referring to 302 in FIG. 3; and at page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.) The apparatus also includes means for executing

the loaded vocoder (110) in the processor (302) of the called party's handset (108), wherein the vocoder (110) translates voice data communicated to the called party's handset (108) from the calling party's handset (108). (This is a means plus function element and the structures and acts described in the specification corresponding to this claimed function are found in the specification at page 5, lines 4-25 referring to 100, 108, and 110 in FIG. 2; page 5, line 26 through page 6, line referring to 302 in FIG. 3; and at page 6, line 19 through page 7, line 9 referring to 400, 402, 404 and 406 in FIG. 4.)

#### VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Whether claims 1-24 are obvious under 35 U.S.C. §103(a) in view of the combination of U.S. Patent 6,493,325 (Hjalmtysson) and U.S. Patent 6,181,734 (Palermo).

#### VII. ARGUMENT

A. Arguments Directed To The First Grounds for Rejection: Whether claims 1-24 are obvious under 35 U.S.C. §103(a) in view of the combination of U.S. Patent 6,493,325 (Hjalmtysson) and U.S. Patent 6,181,734 (Palermo).

In the Office Action, claims 1-24 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,493,325 (Hjalmtysson) in view of U.S. Patent No. 6,181,734 (Palermo).

The Office Action asserts that Hjalmtysson teaches that a party can encode a telephone call and notify the receiver of the call of the encoding/decoding technique appropriate for conducting the call, so that, once notification is provided, the called party can retrieve the decoding/encoding software.

However, the Office Action admits that Hjalmtysson does not expressly disclose loading one of a plurality of software-defined vocoders into the called party's handset.

On the other hand, the Office Action asserts that Palermo teaches a radio communication system wherein a vocoder is loaded into the called party's handset based on the type of network.

The Office Action also asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to implement a system that loads a vocoder into the called party's handset, such as suggested by Palermo, in the system of Hjalmtysson. According to the Office action, by doing so, the called party would easily adapt to the signaling requirements of the calling party by avoiding negotiation of signaling standards between the calling party and the called party.

Appellants' attorney respectfully disagrees and asserts that the combination of Hjalmtysson and Palermo does not teach all the limitations of Appellants' claims.

For example, in one instance, Hjalmtysson merely states that Internet telephones may operate using different telephone application software, that is, each may employ different coding and decoding techniques which in fact could be proprietary techniques. See, col. 3, lines 33-65. Hjalmtysson provides a method for overcoming this problem whereby one of the Internet phones can notify the other Internet phone at the beginning of the call and identify the coding/decoding technique that the Internet phone wishes to use in connection with the call. However, in this instance, both Internet telephones are on the same type of network, namely the Internet, and the coding/decoding software is not loaded into the called party's handset based on the type of network communicating with the calling party's handset.

Moreover, in another instance, where one caller uses a standard telephone and the other caller uses an Internet telephone, Hjalmtysson merely states that that a gateway within the network can bridge the call by loading the appropriate software and performing the desired translation. See, col. 5, line 63 – col. 6, line 31. However, in this instance, the gateway, not the called party's phone, loads the coding/decoding software in order to translate the call.

Similarly, Palermo merely states that a vocoder is loaded into a handset based on the type of network (i.e., waveform) used with that handset, not based on the type of network used by the other handset.

Thus, the combination of Hjalmtysson and Palermo does not teach or suggest:

- (a) the limitations of claims 1-8 directed to transmitting a notification to a called party's network that a calling party's handset is calling from a particular type of network, and then loading one of a plurality of vocoders into the called party's



handset based on the transmitted notification;

- (b) the limitations of claims 9-16 directed to receiving a notification from a calling party's network that it is a particular type of network, and then loading one of a plurality of software-defined vocoders into a called party's handset based on the received notification; or
- (c) the limitations of claims 17-24 directed to loading one of a plurality of vocoders into a processor of a called party's handset, wherein the loaded vocoder is selected based on a particular type of network communicating with a calling party's handset.

Appellants' attorney also submits that the combination of Hjalmtysson and Palermo teaches away from Appellants' claimed invention.

It is respectfully submitted that the combination of Hjalmtysson and Palermo teaches:

- (1) loading a vocoder into a called party's handset based on the type of vocoder in the calling party's handset, not the type of network being used by the calling party's handset (Hjalmtysson);
- (2) loading a vocoder into a gateway in the network when one party uses an Internet phone and the other party uses a standard phone, so that the gateway can translate the call, not the called party's phone (Hjalmtysson); and
- (3) loading a vocoder into the called party's handset based on the type of network being used by the called party's handset, not the type of network being used by the calling party's handset (Palermo).

Appellants' invention, on the other hand, loads one of a plurality of vocoders into a called party's handset based on a notification transmitted to or received by the called party's network that a calling party's handset is calling from a particular type of network.

Thus, Appellants' attorney submits that independent claims 1, 5, 9, 13, 17, and 21 are allowable over Hjalmtysson and Palermo. Further, dependent claims 2-4, 6-8, 10-12, 14-16, 18-20, and 22-24 are submitted to be allowable over Hjalmtysson and Palermo in the same manner, because they are dependent on independent claims 1, 5, 9, 13, 17, and 21, respectively, and thus contain all the limitations of the independent claims.

VIII. CONCLUSION

In light of the above arguments, Appellants' attorney respectfully submits that the cited references do not anticipate nor render obvious the claimed invention. More specifically, Appellants' claims recite novel physical features which patentably distinguish over any and all references under 35 U.S.C. §§ 102 and 103.

As a result, a decision by the Board of Patent Appeals and Interferences reversing the Examiner and directing allowance of the pending claims in the subject application is respectfully solicited.

Respectfully submitted,

GATES & COOPER LLP  
Attorneys for Appellants

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Date: April 27, 2007

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## CLAIMS APPENDIX

1. (PREVIOUSLY PRESENTED) A method for tunneling voice data over one or more networks, comprising:

(a) transmitting a notification to a called party's network that a calling party's handset is calling from a particular type of network; and

(b) loading one of a plurality of software-defined vocoders into the called party's handset based on the transmitted notification, wherein the loaded software-defined vocoder, when executed by the called party's handset, translates voice data communicated between the calling party's handset and the called party's handset.

2. (ORIGINAL) The method of claim 1, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks, to the called party's network and called party's handset, without any vocoding conversions, except at the handsets.

3. (PREVIOUSLY PRESENTED) The method of claim 1, wherein the software-defined vocoder is stored on a component of the called party's network and is downloaded from the component to the called party's handset.

4. (ORIGINAL) The method of claim 1, wherein the notification is transmitted during call setup.

5. (PREVIOUSLY PRESENTED) An apparatus for tunneling voice data over one or more networks, comprising:

(a) means for transmitting a notification to a called party's network that a calling party's handset is calling from a particular type of network; and

(b) means for loading one of a plurality of software-defined vocoders into the called party's handset based on the transmitted notification, wherein the loaded software-defined vocoder, when executed by the called party's handset, translates voice data communicated between the calling party's handset and the called party's handset.

6. (ORIGINAL) The apparatus of claim 5, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks, to the called party's network and called party's handset, without any vocoding conversions, except at the handsets.

7. (PREVIOUSLY PRESENTED) The apparatus of claim 5, wherein the software-defined vocoder is stored on a component of the called party's network and is downloaded from the component to the called party's handset.

8. (ORIGINAL) The apparatus of claim 5, wherein the notification is transmitted during call setup.

9. (PREVIOUSLY PRESENTED) A method for tunneling voice data over one or more networks, comprising:

(a) receiving a notification from a calling party's network that it is a particular type of network; and

(b) loading one of a plurality of software-defined vocoders into a called party's handset based on the received notification, wherein the loaded software-defined vocoder, when executed by the called party's handset, translates voice data communicated between the calling party's handset and the called party's handset.

10. (ORIGINAL) The method of claim 9, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks, to the called party's network and called party's handset, without any vocoding conversions, except at the handsets.

11. (PREVIOUSLY PRESENTED) The method of claim 9, wherein the software-defined vocoder is stored on a component of the called party's network and is downloaded from the component to the called party's handset.

12. (ORIGINAL) The method of claim 9, wherein the notification is transmitted during call setup.

13. (PREVIOUSLY PRESENTED) An apparatus for tunneling voice data over one or more networks, comprising:

(a) means for receiving a notification from a calling party's network that it is a particular type of network; and

(b) means for loading one of a plurality of software-defined vocoders into a called party's handset based on the received notification, wherein the loaded software-defined vocoder, when executed by the called party's handset, translates voice data communicated between the calling party's handset and the called party's handset.

14. (ORIGINAL) The apparatus of claim 13, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks, to the called party's network and called party's handset, without any vocoding conversions, except at the handsets.

15. (PREVIOUSLY PRESENTED) The apparatus of claim 13, wherein the software-defined vocoder is stored on a component of the called party's network and is downloaded from the component to the called party's handset.

16. (ORIGINAL) The apparatus of claim 13, wherein the notification is transmitted during call setup.

17. (PREVIOUSLY PRESENTED) A method for tunneling voice data over one or more networks, comprising:

(a) loading one of a plurality of vocoders into a processor of a called party's handset, wherein the loaded vocoder is selected based on a particular type of network communicating with a calling party's handset; and

(b) executing the loaded vocoder in the processor of the called party's handset, wherein the vocoder translates voice data communicated to the called party's handset from the calling party's handset.

18. (PREVIOUSLY PRESENTED) The method of claim 17, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks, to the called party's network and the called party's handset, without any vocoding conversions, except at the handsets.

19. (PREVIOUSLY PRESENTED) The method of claim 17, wherein the vocoder is stored on a component of the handset and is loaded into the processor from the component.

20. (PREVIOUSLY PRESENTED) The method of claim 17, wherein the vocoder is stored on a network component and is downloaded from the network component into the processor of the handset.

21. (PREVIOUSLY PRESENTED) An apparatus for tunneling voice data over one or more networks, comprising:

(a) means for loading one of a plurality of vocoders into a processor of a called party's handset, wherein the loaded vocoder is selected based on a particular type of network communicating with calling party's handset; and

(b) means for executing the loaded vocoder in the processor of the called party's handset, wherein the vocoder translates voice data communicated to the called party's handset from the calling party's handset.

22. (PREVIOUSLY PRESENTED) The apparatus of claim 21, wherein the voice data is tunneled from the calling party's handset and the calling party's network, through any number of different networks, to the called party's network and the called party's handset, without any vocoding conversions, except at the handsets.

23. (PREVIOUSLY PRESENTED) The apparatus of claim 21, wherein the vocoder is stored on a component of the handset and is loaded into the processor from the component.

24. (PREVIOUSLY PRESENTED) The apparatus of claim 21, wherein the vocoder is stored on a network component and is downloaded from the network component into the processor of the handset.

## **EVIDENCE APPENDIX**

None.



## **RELATED PROCEEDINGS APPENDIX**

None.